



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, Washington 98101

Reply To  
Attn Of: ECO-088

APR 27 2000

Lieutenant Colonel William E. Bulen, Jr., Commander  
Department of the Army  
Walla Walla District  
U. S. Army Corps of Engineers  
201 North Third Avenue  
Walla Walla, Washington 99362-1876

Dear Lieutenant Colonel Bulen:

The U.S. Environmental Protection Agency (EPA) has reviewed the **Lower Snake River Juvenile Salmon Migration Draft Feasibility Report and Environmental Impact Statement (DEIS)**. This report looks at four alternatives to improve passage of juvenile salmon through the four lower Snake River dams and the technical, environmental, and economic impacts of each of the alternatives. Our review was done in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act (CAA). CAA Section 309, independent of NEPA, specifically directs EPA to review and comment in writing on the environmental impacts associated with all major federal actions.

EPA is a cooperating agency for this DEIS. We have corresponded with the U.S. Army Corps of Engineers (Corps) on numerous occasions since 1996 relaying our water quality and air quality concerns. We have worked closely with the Corps in the National Marine Fisheries Service/Endangered Species Act Forum, the Federal Caucus and the All-H Process. Further, we are currently working with the Corps to develop a water quality strategy for the 2000 Federal Columbia River Power System Biological Opinion. We know that solving water quality problems in the Federal Columbia River Power System is a very difficult task and we are committed to working closely with the Corps on this issue. In that regard, our key staff met on April 21, 2000, to discuss EPA's issues with the DEIS and to develop a process for resolving those concerns. We reached agreement on the need to clarify the impact of the existing dams on water quality. We assigned a workgroup of technical staff from both of our agencies to conduct a joint water quality analysis to be included in the next version of the EIS. We also agreed to work together on air quality, economics and the other issues EPA has raised, in order to resolve them

for publication of the EIS.

EPA's primary goal in the Columbia Basin is to improve water quality for ecosystem recovery by ensuring that federal dams are operated in a manner that results in attainment of state water quality standards. This is consistent with our trust responsibility to Columbia River Tribes.

Based upon our review, we have rated the DEIS, 3 (Inadequate). Our review determined that the DEIS does not adequately assess the potentially significant environmental impacts of all the alternatives. Specifically, the DEIS:

- improperly evaluates the water quality impacts of alternatives 1 through 4;
- does not include a strategy to comply with water quality standards;
- does not include the costs of achieving water quality standards under alternatives 1 through 3 in the economic analysis; and
- does not adequately evaluate the air quality impacts of any of the alternatives.

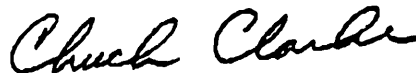
Since there was no preferred alternative, we rated the environmental impact of each alternative. We rated Alternatives 1, 2 and 3 as EU (Environmentally Unsatisfactory). We rated Alternative 4 as EC (Environmental Concerns). These ratings reflect the scope of this EIS process: hydropower impacts to the lower Snake River salmon stocks. The EIS process is only one part of a broader Regional process to determine the best strategy for salmon recovery across the Columbia Basin. The final decision on the lower Snake River dams will come from that broader process. The ratings are based on the fact that alternatives 1-3 will continue the current water quality standard exceedances and Alternative 4 is the only alternative presented in the DEIS that will likely result in attainment of WQS in at least the mid-term. Attached is an explanation of the EPA rating system and our detailed comments. This rating and a summary of these comments will be published in the Federal Register.

The DEIS does not adequately characterize the impacts of the existing dams on water quality. We are particularly concerned with the DEIS' treatment of temperature. The document concludes that the lower Snake River dams actually lower water temperature in the impoundments. We believe that this conclusion results from selective use of data and selective use of modeling results. EPA water temperature modeling clearly demonstrates that the dams cause water quality standard exceedances almost on a daily basis during the hot part of the summer by inhibiting the diurnal water temperature fluctuations that occur under free flowing conditions. Dams also delay or even preclude the water cooling effects of cool weather caused by weather fronts or changing seasons, leading to numerous days of exceedance of the water quality standard. The attached comments explain our analysis of temperature in detail and also address the impacts of dams on total dissolved gas (TDG) and dissolved oxygen (DO). The DEIS understates the impacts of the dams on TDG and does not discuss nonattainment of the DO standard, although those exceedances are revealed in data presented in Appendix C.

The EIS must acknowledge the effects of the existing dams on water quality. Water quality impacts are particularly important because they pertain directly to the biological requirements of the fish that the feasibility study is intended to address. Attainment of water quality standards should be a major factor in selection of the preferred alternative because of the biological requirements of the fish and the objectives of the CWA.

Based on our review, we do not believe that the DEIS is adequate for the purposes of NEPA. The major deficiency is that the water quality impacts of Alternatives 1, 2 and 3 are not adequately characterized and no strategy is presented to mitigate those impacts. I look forward to working with you to address the issues raised in this letter. However, if we are unable to resolve our concerns, this matter may become a potential candidate for referral to the Council on Environmental Quality for resolution. It is essential for the EIS to discuss all of the environmental impacts of all of the alternatives. Please call me at (206) 553-1234 to discuss these comments or have your staff contact Richard Parkin at (206) 553-8574.

Sincerely,



Chuck Clarke  
Regional Administrator

Enclosure